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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,066	11/19/2003	Rolf Hilgendorf	BUR920030068US1	1065
21918	7590	02/08/2005	EXAMINER	
DOWNS RACHLIN MARTIN PLLC 199 MAIN STREET P O BOX 190 BURLINGTON, VT 05402-0190			NGUYEN, MINH T	
			ART UNIT	PAPER NUMBER
			2816	

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/707,066

Applicant(s)

HILGENDORF ET AL.

Examiner

Minh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-18 is/are allowed.
- 6) ☒ Claim(s) 1,3,6 and 8 is/are rejected.
- 7) ☒ Claim(s) 2,4,5,7,9 and 10 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,317,601, issued to Riordan et al.

As per claim 1, Riordan discloses an integrated circuit (Fig. 3), comprising:

a clock divider circuit (the combination of the following discussed elements) comprising:

a counter (counter 60, column 4, lines 38-43) operatively configured to generate a plurality of first signals (M1, M2, D2 and D4) from a second signal (PLL4X), each one of said plurality of first signals having a first phase (the phases of the corresponding first signals) and said second signal having a second phase (the phase of the PLL4X signal); and

a mux (65, column 4, line 45) in electrical communication with said counter and operatively configured to output a selected one of said plurality of first signals (this is the function of a mux, column 4, lines 44-48); and

a phase detector (latch 77, column 5, lines 11-12) operatively configured to detect an offset between said first phase of said selected one of said plurality of first signals and said second phase of said second signal and generate a third signal representing said offset (as shown

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in Fig. 3, the offset at the output Q is generated by the selected one of the first signals in accordance to the second signal PLL4X. In other words, the difference in phase between the selected one of the first signals and the second signal is detected).

As per claim 3, the recited limitation is disclosed in column 4, lines 38-43, i.e., $n=2, 4, 8, \dots$; Further, because the selected one of the first signals is clocked by the second signal PLL4X as shown in Fig. 3, the selected one of the first signals is measured $n/2$ times.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,317,601, issued to Riordan et al.

As per claim 6, Riordan discloses a microprocessor (Fig. 1, column 2, lines 55-56, CMOS RISC) which includes a clock divider circuit having elements discussed in claim 1 herein above. Riordan does not explicitly disclose a system which comprises a plurality of such microprocessors as called for in the claim.

The examiner takes Official Notice the fact that computer system using a plurality of microprocessors is popular and well-known in the art.

It would have been obvious to one skilled in the art at the time of the invention was made to use the microprocessor taught by Riordan for implementing a computer system comprises a

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plurality of microprocessors for the advantage explicitly discloses in the Riordan's summary of invention section.

As per claim 8, this claim is rejected for the same reason noted in claim 3.

Allowable Subject Matter

3. Claims 2, 4-5, 7 and 9-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 2 is allowable because the prior art of record fails to disclose or suggest the inclusion of a mesh delay and a delay circuitry configured as recited in the claim.

Claims 4-5 are allowable because the prior art of record fails to disclose or suggest the inclusion of a counter reset circuitry responsive to the third signal for performing the function recited in claim 3.

Claims 7 and 9-10 are allowable for the same reasons noted in claims 2 and 4-5, respectively.

4. Claims 11-18 are allowed.

Claims 11-18 are allowed because the prior art of record fails to disclose or suggest the inclusion of a step of resetting the divide by counter based upon the phase offset.

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Nguyen whose telephone number is **571-272-1748**. The examiner can normally be reached on Monday, Tuesday, Thursday, Friday 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



2/4/05

Minh Nguyen
Primary Examiner
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